

The History of American Motors

Since American Motors (Canada) Limited was formed in 1956, the company has grown from a modest sales and service organization into one of Canada's major manufacturing companies. But if the growth of the Canadian company has been relatively brief, the history of its parent company has followed a long and often colourful path.

The first Rambler rolled out of a Kenosha, Wisconsin bicycle shop in 1902. It was built by an English-born inventor named Thomas B. Jeffrey, and was one of the first mass-produced cars in an age when 50 miles was considered a major journey. The main U.S. manufacturing plant is still in Kenosha, where the annual production rate of cars dwarfs Jeffrey's rate of 1500 per annum, but not his initial achievement.

During the first half-century, the group of companies which eventually evolved into American Motors produced such classics as the Nash, Ajax, Lafayette, Hudson, Terraplane, Essex and the little Nash Metropolitan. Several mergers took place during these years but finally, in 1954, Nash-Kelvinator and the Hudson Motor Company merged to form the American Motors Corporation. The merger marked the beginning of a new era of growth, part of which was the rapid development of the Canadian company.

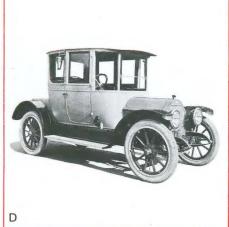
For two years following the American merger, separate sales and service organizations continued operating in Canada under the Nash and Hudson banners. But in 1956, American Motors (Canada) Limited was formed and shortly after that, the new Rambler went into production.

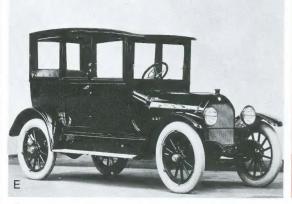
The newly formed Canadian company prospered and soon outgrew the original Toronto premises.













- A. 1909 Hudson
- B. 1919 Essex
- C. Thomas B. Jeffery in the first experimental Rambler—1897
- D. 1913 Hudson
- E. 1916 Jeffery
- F. 1925 Ajax

In January 1961, the Brampton plant was opened, with a capacity to produce up to 10,000 units per year. With the Canadian-U.S. Auto Trade Agreement, the company continued to expand and a Parts and Service Operations warehouse covering 120,000 sq. ft. was added. Today the Brampton plant is equipped to turn out over 40,000 units per year.

Elsewhere in Canada, the company has broadened the scope of its operations considerably. In 1970, American Motors acquired Holmes Foundry in Sarnia which produces engine blocks for AM cars in addition to manufacturing castings for other companies. A new plant at Stratford, Ontario called Canadian Fabricated Products was opened in 1971 to produce most of the "soft trim" items found on AM cars.

Internationally, American Motors has been just as active, diversifying its operations, and increasing its markets. In 1970, the company acquired the Jeep Corporation, in a merger which doubled the size of AM's international operations and gave them 20% of the four-wheel drive market.

Today American Motors ranks among the top 100 corporations in both Canada and the U.S. with sixteen manufacturing plants in North America alone. Internationally, AM can boast manufacturing plants, assembly plants, subsidiaries, licensees, or affiliated companies in 32 countries. AM cars account for more than 10% of all U.S. passenger car exports.

With this broad base of operations, American Motors is more than able to meet the challenges of the competitive seventies. With a vehicle to suit every taste and budget and a sharp eye on the needs and preferences of the car consumer, AM is equipped to increase its share of the automotive market.



G







- G. 1935 LaFayette
- H. 1932 Essex
- I. 1956 Metropolitan
- J. 1961 Rambler American

A Few Of Our Achievements

In the early days of motoring, the companies which were to become American Motors claimed many "firsts". Among them were the steering wheel, first introduced in 1901 and an enclosed rear deck for luggage and spare tires, introduced in 1914.

In more recent times, American Motors is remembered as the company which first introduced the compact car to the North American market. Its purpose was to counterbalance the design and power extremes of other domestic makes and to compete with the growing influx of European cars. The new compact completely changed the car-buying public's way of thinking and subsequently the whole auto industry.

In 1970, AM was again first among North American car manufacturers with a sub-compact—the Gremlin.

Since the Rambler re-entered the scene in 1956, American Motors has introduced the Ambassador, Javelin, Matador, AMX, Hornet, Gremlin and Pacer, all of which have maintained the Rambler's reputation for good design, quality construction and top performance.

Work began on the Pacer as early as 1970 when surveys indicated a strong trend through the next decade towards smaller, more functional vehicles. AMC's entry into the small car market would differ from the others in that it would incorporate all the creature comforts North Americans had become accustomed to. The car would be designed from the inside out with "people space" the key requirement.

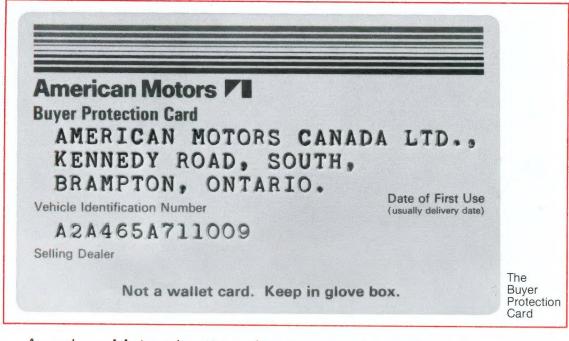
Today the overall reception and sales success of the Pacer reinforces this approach to small car design.

AMC has always been extremely conscious of its obligation to produce safe cars and maintain a healthy environment. In the field of pollution control, AMC was active in the early 1950's, working on engine improvements. Today, all AMC cars are equipped with exhaust emission

control units which drastically reduce the amount of

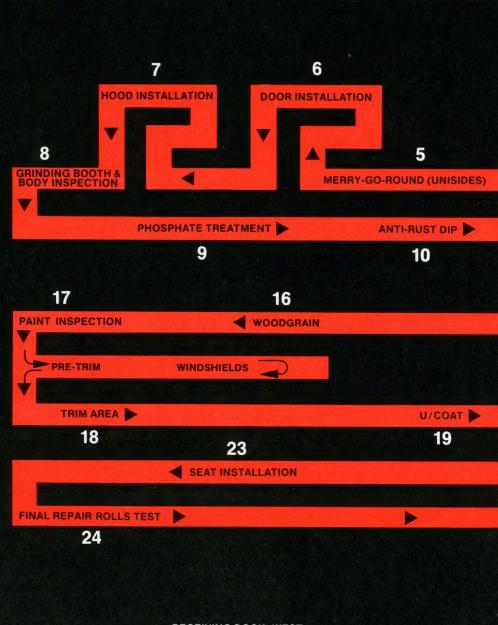
pollutants produced.

In 1972, American Motors Corporation recorded another first in benefits for the car-buying public—the AMC Buyer Protection Plan. In addition to guaranteeing every part of the car except the tires for 12 months or 12,000 miles, the plan also supplies the customer with a loaner car if his car needs overnight repairs.



American Motors is attuned to consumer needs and desires and has set a pattern of anticipating trends and preferences long before other manufacturers. Although AM is the "little guy" in the automotive industry, the record shows that it is anything but a "me too" company following in the footsteps of its bigger brothers.

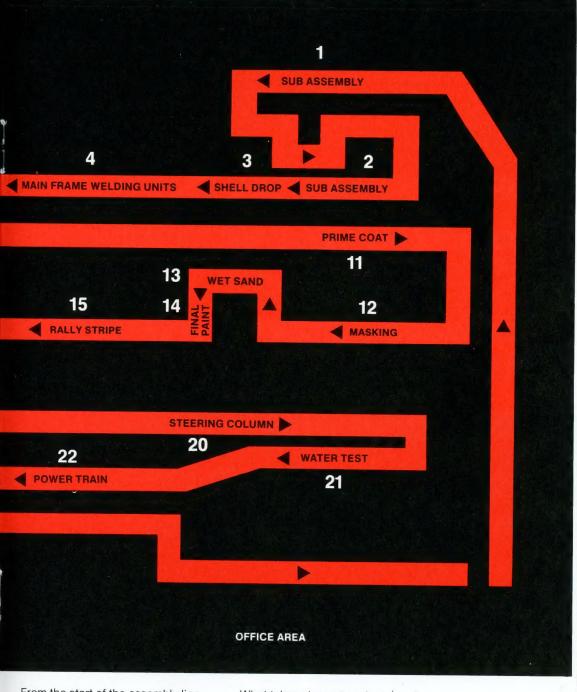
Our dedication to public concern and automotive improvements has established AM's reputation as a pioneer and pacesetter. It is a reputation AM intends to maintain and improve upon in the years ahead. The public can continue to expect the best first from American Motors.



RECEIVING DOCK/WEST

The American Motors Brampton plant is divided into three working areas—the body shop, the paint shop and the trim and final shop.





From the start of the assembly line to the finish, the cars are almost continuously in motion, moving from one station to the next.

What takes place at each stage of production will be explained on the following pages.

Sub-Assembly

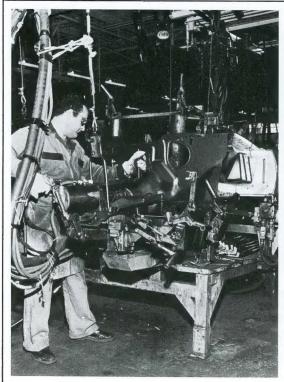
In this section (stages 1 & 2), the smaller parts which make up the floor pans and firewall (the part which will hold the engine) are welded together. AMC cars are welded units—they are not built on frames. This method gives a car more solidity and cuts down on body noise, especially as the car gets older. When the floor and front section are complete, the car is ready to start down the assembly line.

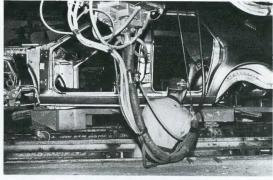
The Body Shell

At stage 5, known as the Merry-go-round or Unisides, the side pieces are placed in jigs to hold them in place then welded into a solid side. The side pieces then move back down the assembly line to stage 4 where two sides and a roof are placed in a "framing jig" and welded together to form a body shell. This shell is lifted up by an overhead conveyor and lowered onto a floor unit at stage 3, the shell drop. The skeleton of the future car has emerged and is ready to be "fitted out".

Door & Hood Installation

With an instrument which resembles an ordinary household drill, the workmen bolt the doors, which have been lifted up on a rig, at stage 6. The car then moves on to stage 7 where both the hood and the trunk are fitted in the same manner. All the hinges are checked to make sure they are working smoothly.







Grinding Booth and Body Inspection

The paint section will not accept any car unless the bodywork is completely smooth. To do this, the body is placed inside the grinding booth, stage 8, where all the rough bits of solder are filed down and sanded. As the car shell leaves the booth, an inspector runs a gloved hand over it, looking for rough patches. If he finds any, the car is sent back into the booth to be re-done.

Phosphate Treatment

Because dirt or grease will render paint patchy, the body is dipped into six baths of chemicals and rinses to scour it clean. This "Bonderite" treatment, stage 9, prepares the car for the paint booth and at the end of this process, certain joints are sealed.

Anti-rust Dip

To protect the car body against the salt, snow and slush of Canadian winters, every AMC car, at stage 10, is dipped up to the top of the doors in a solution which will rust-proof it.



The Paint Tunnel

The paint tunnel is simply a covered section of the assembly line. At stage 11 the car is given a "ground" coat of grey paint, the first of seven coatings the car will receive. Before it receives its final coat, the surface of the car is sanded by hand to make sure the last coat will be perfectly smooth, stage 13. An overhead system sprays water onto the car during sanding to wash away any particles. After the car has been placed in the drying oven, the final coat is sprayed on at stage 14. The paint booth contains a paint barrel and line for every colour in the AMC range. The painter merely takes one line off his spray gun and attaches another in order to change the colour he's spraying. This way paint systems need never be shut down or changed and each car on the assembly line can have different colour specifications.

Just beside the paint tunnel is a small room, stage 15, where the barrels of coloured paint are being mixed continuously and fed into the paint lines, ready for use.

Dash and Windshield Assembly

The dashboard parts such as heaters, radios, dials and lights are fitted into a prefabricated cushioned dash panel. The panel is then fitted into the car. At the same time, an overhead high pressure machine lowers the front and back windshields into place and presses them into waterproof sealing. Both the windshields and dashboard are then thoroughly checked by an inspector. As the car moves off this section of the assembly line, the paint finish is examined by an inspector at stage 17. Any car with paint damage or faults is sent back to the paint booth to be re-sanded and sprayed.

Trim Area

As the car passes down this rather long stretch of the assembly line (stage 18), smaller "trim" items such as door handles, mirrors, windshield wipers and wire harnessing are added to the car. In all, over 8,000 parts go into the making of every AMC car.







Undercoat and Steering

At stage 19, the fuel lines and gas tank are installed and the whole underside is sprayed with an asphalt mixture which further protects the car from rust, salt erosion and general wear and tear. As the car moves on, the "soft trim" items—arm rests, door panels, etc.—are added.

The various parts which make up the steering column are assembled at stage 20, then spray painted in a small paint booth. When it is dry the whole unit is installed and connected.

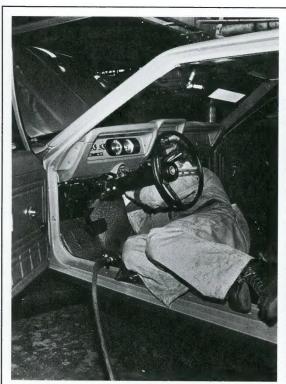
The Water Test

Inside the water tunnel, a solution of water and dye is sprayed at high pressure on the car from every conceivable angle. At the end of the test, stage 21, an inspector with an ultra-violet light, which will detect the dye, searches the car for leaks. If he discovers any, they are repaired at the end of the assembly line in the final repair area.

Power Train

Stage 22 is where the "business" end of the car is assembled and installed. The engines, built at another AMC plant, are run on a test bed to ensure that every engine is operating at peak efficiency before installation. They are then transferred to the assembly plant and installed.

The transmission, drive shaft and rear end are assembled in this section, then placed in a jig and fitted to the car. All specifications have been checked so that each car receives an engine with the right modifications.







Seat and Wheel Installation

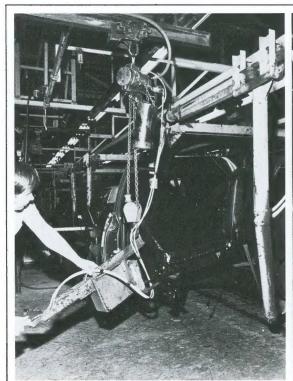
All upholstery work is done in the plant and the seats are covered according to the customer's specifications. When they're ready, the seats are forklifted into place and bolted.

After this, the car descends into a pit where the wheels are put on. An added attraction in this section is the machine which inflates a tire in an instant.

Final Quality Control, Testing and Inspection

Final inspection and minor repairs take place at stage 24. While the car is running on rollers which simulate highway driving conditions, everything—from the cigarette lighter to the parking lights—is checked by an inspector to ensure that all parts are in working condition. From a pit beneath the car, the steering and wheel alignments are adjusted while a workman aims the headlights accurately, using a special instrument.

In the final repair area, any minor defects such as small leaks, are repaired. When everything has been certified to be in perfect working order, the car is given an "OK to ship".







Pacer: the wide, small car from American Motors

A Final Note

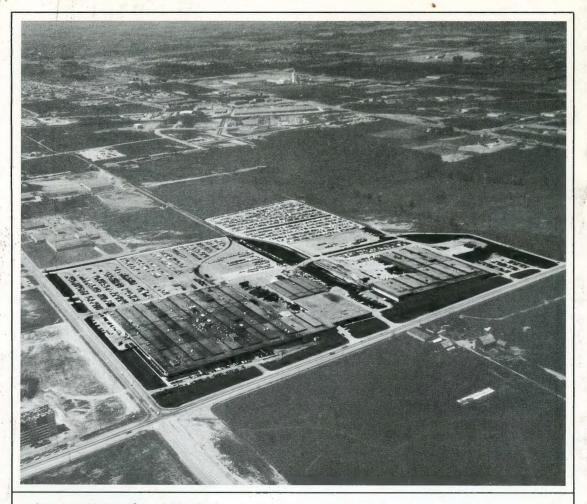
We at AMC are very proud of the tradition we've established for well-built, well-designed automobiles. It is a tradition we hope to continue in the years to come.

Whether it is a visit to a dealer's showroom or a letter of inquiry, we're always glad to see individual interest in American Motors.

Thank you for *your* interest and if you wish any further information, please don't hesitate to contact us.

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American Motors



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